



User Manual

MP-SUHD41-8K

8K Combo Switcher 4x1 w/ GUI Control



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Version: MP-SUHD41-8K_2025V1.0

Preface

Read this user manual carefully before using the product. Pictures shown in this manual are for reference only. Different models and specifications are subject to real product.

This manual is only for operation instruction, please contact the local distributor for maintenance assistance. The functions described in this version were updated till Oct. 11th, 2025. In the constant effort to improve the product, we reserve the right to make functions or parameters changes without notice or obligation. Please refer to the dealers for the latest details.

FCC Statement

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation.

Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference.

Any changes or modifications not expressly approved by the manufacture would void the user's authority to operate the equipment.



SAFETY PRECAUTIONS

To ensure the best from the product, please read all instructions carefully before using the device. Save this manual for further reference.

- Unpack the equipment carefully and save the original box and packing material for possible future shipment.
- Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- Do not dismantle the housing or modify the module. It may result in electrical shock or burn.
- Using supplies or parts not meeting the products' specifications may cause damage, deterioration or malfunction.
- Refer all servicing to qualified service personnel.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Do not put any heavy items on the extension cable in case of extrusion.
- Do not remove the housing of the device as opening or removing housing may expose you to dangerous voltage or other hazards.
- Install the device in a place with fine ventilation to avoid damage caused by overheat.
- Keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Do not twist or pull by force ends of the optical cable. It can cause malfunction.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- Unplug the power cord when left unused for a long period of time.
- Information on disposal for scrapped devices: do not burn or mix with general household waste, please treat them as normal electrical wastes.

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1. Product Introduction

The 4 Inputs 8K 40G switcher is designed to enable a true 8K display. It supports max 8K@60Hz 4:4:4 resolution (for HDMI input with DSC). The switcher features 2 HDMI inputs, 2 USB-C inputs and one HDMI output, USB-C supports with extra 100W PD charging.

It also supports audio return channel (eARC) and audio de-embedded. Except passing EDID information from the display, there are multiple built-in EDID settings to simplify an installation.

It supports with auto/manual switching, in auto-switch mode, it switches to an HDMI input as soon as a new source is connected. When the active input is removed, the switcher will select the first source on the lowest numbered input. The switcher may also be controlled via GUI, RS232, IR with the included remote, or from the source button on the front of the switcher.

1.1 Features

- 4 ways 8K switcher with 2 HDMI & 2 USB-C.
- Supports video resolution up to 8K@60Hz 4:4:4, Dolby Vision, HDR.
- Supports enhanced audio return channel (eARC) and audio de-embedded.
- Advanced EDID and HDCP management
- Controllable via button, GUI, RS232 and IR.
- Supports USB-C 100W PD charging.
- Firmware upgrade by USB-C

1.2 Package List

• 1x 8K 4x1 Switcher
• 4x Plastic Cushions
• 1x Power Adapter (12VDC 2A)
• 1x 3 Pin terminal block
• 1x User Manual
• 2x Mounting Ears & 2x Screws
• 1x Remote controller (Exclude Battery)

Note: Please contact your distributor immediately if any damage or defect in the components is found.

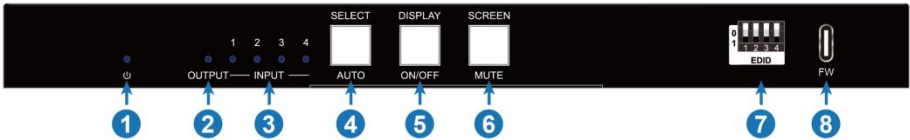
2. Specification

Video Input	
Input	(2) HDMI, (2) USB-C
HDMI Standard	2.1
HDCP Version	2.3
Video Output	
Output	(1) HDMI
HDMI Output Resolution	Up to 8K@60Hz 4:4:4, Dolby Vision, HDR+ (HDMI Input with DSC)
	Up to 8K@30Hz 4:2:2, Dolby Vision, HDR+ (USB-C Input)
HDMI Standard	2.1
HDCP Version	2.3
Audio	
Output	(1) Digital SPDIF audio; (1) L/R audio, eARC
HDMI & SPDIF output audio format	LPCM 7.1ch, Dolby Digital plus , Dolby Atmos 5.1.2ch , Atmos DTHD, Atmos DD+
L/R output audio format	LPCM 7.1ch
eARC output audio format	PCM
Frequency Response	20Hz to 20kHz, $\pm 3\text{dB}$
Control	
Control	(1) IR EYE; (1) RS232; (1) TCP/IP
Control Connector	(1) 3.5mm mini jack; (1) 3-pin terminal block; (1) RJ45
General	
Bandwidth	40Gbps (Max 8K60Hz 4:4:4 DSC)
Operation Temperature	-5 to +55°C (+23° to +131°F)
Storage Temperature	-25 to +70°C (-13° to +158°F)
Relative Humidity	0% to 85%, Non-condensing
Power Supply	12V DC 2A
Power Consumption	3.9W (Max)
Dimension (W*H*D)	230mm x 21mm x 91.65mm

Note: Please adopt high-qualified HDMI cable fully compliant with HDMI 2.1 for reliable transmission and connection.

3. Panel Description

3.1 Front Panel



- ① **POWER LED:** The LED illuminates blue when device is power on and working , the LED illuminates red when it is standby.
- ② **OUTPUT LED:** The LED illuminates blue when output connected.
- ③ **INPUT 1~4 LED:** The LED illuminates blue when there is HDMI input on the corresponding channel. The LED blinks once a second when no signal connection.
- ④ **Auto/Select button with blue LED inside**
 - Press and hold for three seconds to switch between manual mode and auto mode. The button illuminates blue when auto mode.
 - Press to switch to next input source When in manual switch mode.
 - When in AUTO mode, the LED inside will illuminate blue.
- ⑤ **Display ON/OFF button with blue LED inside**
 - Press the button to choose output display on/off.
 - When set to turn off the display, the LED inside will illuminate blue.
- ⑥ **SCREEN MUTE button with blue LED inside**
 - Press the button to mute both video and audio or not.
 - When set to mute both video and audio, the LED inside will illuminate blue.
- ⑦ **EDID:** 4-pin DIP switch for EDID setting.

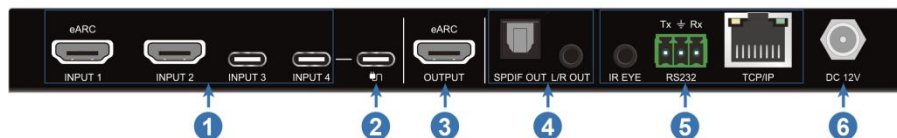
	ID	Switch Status	Video	Audio
	0	0000	EDID Pass-through (Copy from HDMI OUT) (default)	Pass though
	1	0001	1920x1080p@60Hz 4:4:4	2.0CH PCM
	2	0010	1920x1080p@60Hz 4:4:4	5.1CH DTS/Dolby

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	3	0011	3840x2160p@60Hz 4:4:4, 8bit colour	2.0CH PCM
	4	0100	3840x2160p@60Hz 4:4:4, 8bit colour	5.1CH DTS/Dolby
	5	0101	3840x2160p@120Hz 4:4:4, 10bit, HDR/DV	2.0CH PCM
	6	0110	3840x2160p@120Hz 4:4:4, 10bit, HDR/DV	5.1CH DTS/Dolby
	7	0111	3840x2160p@120Hz 4:4:4, 12bit, HDR/DV	2.0CH PCM
	8	1000	3840x2160p@120Hz 4:4:4, 12bit, HDR/DV	5.1CH DTS/Dolby
	9	1001	7680x4320@60Hz 4:2:0, 10bit, HDR/DV	2.0CH PCM
	1 0	1010	7680x4320@60Hz 4:2:0, 10bit, HDR/DV	5.1CH DTS/Dolby
	11	1011	7680x4320@60Hz 4:2:0, 12bit, HDR/DV	2.0CH PCM
	1 2	1100	7680x4320@60Hz 4:2:0, 12bit, HDR/DV	5.1CH DTS/Dolby
	1 3	1101	7680x4320@60Hz 4:2:0, 12bit colour, HDR/DV	2.0ch PCM, Incl. VRR/DSC
	1 4	1110	7680x4320@60Hz 4:2:0, 12bit, HDR/DV	5.1ch DTS/Dolby, Incl. VRR/DSC
	1 5	1111	Command mode – (RS232/LAN)	

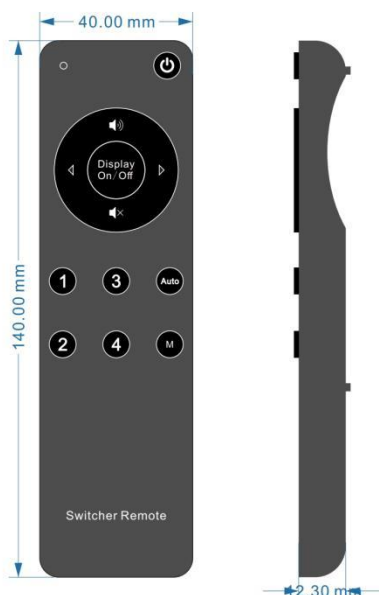
⑧ Service: USB-C port for firmware upgrade.

3.2 Rear Panel



- ① **INPUT 1 ~ 4:** Two female HDMI input ports and 2 USB-C input ports to connect HDMI and USB sources. The input 1 port supports eARC.
- ② **USB-C Charging:** USB-C input port to connect with PD PSU, support max 100W charging (PD PSU excluded in the package).
- ③ **OUTPUT :** The female HDMI output port to connect HDMI display, support eARC.
- ④ **Audio**
SPDIF OUT: SPDIF for audio de-embedded from HDMI output.
L/R OUT: 3.5mm mini jack for audio de-embedded from HDMI output.
- ⑤ **Control**
IR EYE: 3.5mm mini jack for guest mode.
RS232: 3-pin terminal block to connect the RS232 control device (e.g. PC) or a third-party device to be controlled by RS232 commands.
TCP/IP: RJ45 port to connect the control device (e.g. PC) to control the switcher by GUI.
- ⑥ **DC 12V:** DC port to connect a 12V2A power adapter

4. IR Remote



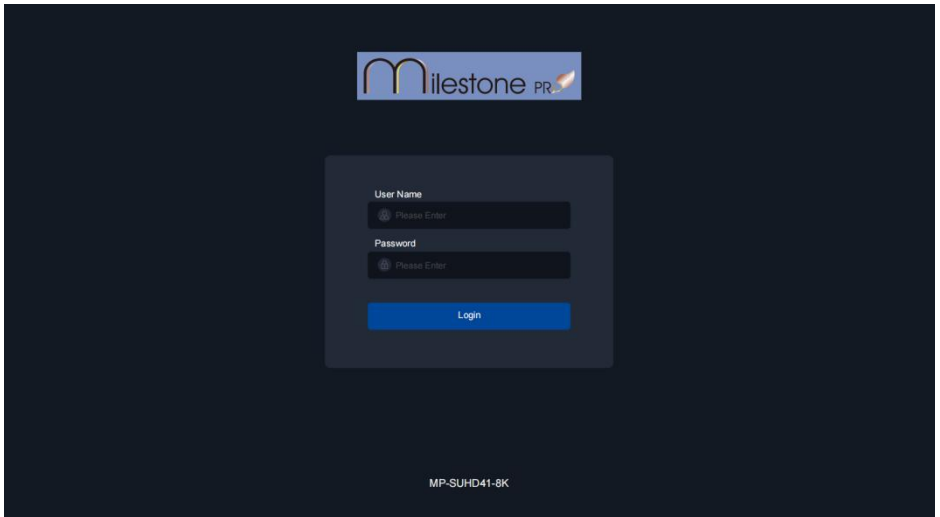
- ① **INPUTS:** Press 1-4 button to select the input sources.
- ② Press **AUTO** button to automatically detect the input sources.
- ③ **Display On/Off:** Press button to choose display on/off
- ④ **Volume Adjust:** Press volume button to raise or reduce the volume
- ⑤ **M: M** button means screen mute, to mute both video and display at the same time.

5. GUI Control

The switcher can be controlled via TCP/IP. The default IP settings are:

IP Address:	192.168.0.178
Subnet Mask:	255.255.255.0

Type **192.168.0.178** in the internet browser, it will enter the below log-in web page:

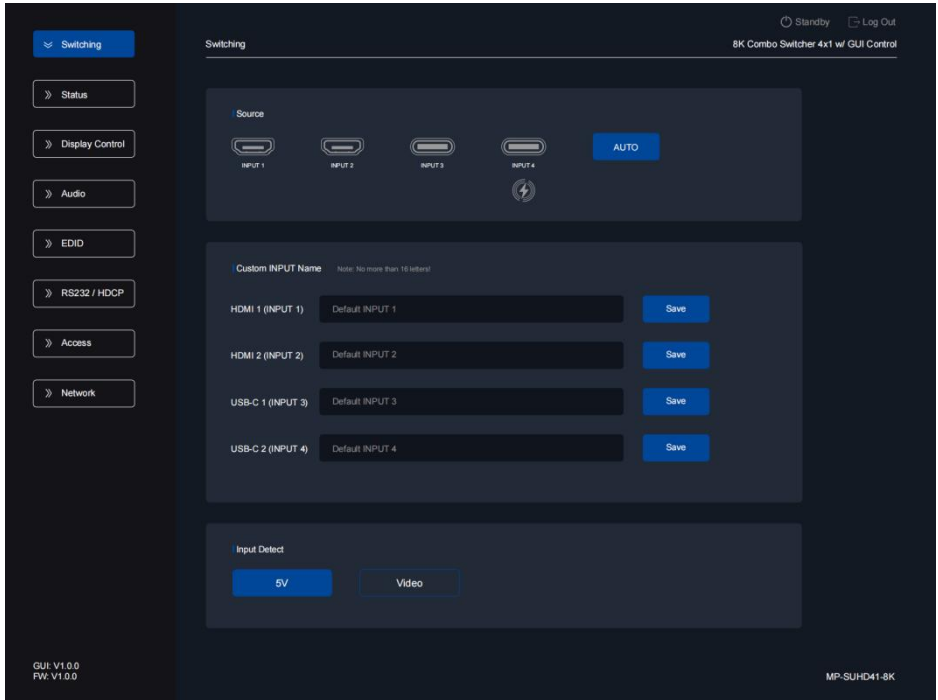


Username: Admin

Password: Admin

Type the user name and password, and then click **Login** to enter the section for video switching.

5.1 Switching Tab



- Set auto or manual switching.
- Choose the inputs 1 ~4 to actual usage.
 - 1) The 4th input without TMDS.
 - 2) When there is no connecting for selected input, the correspond input led indicator will blink/
- Set the auto mode detect by 5V or video detect.
- To show charging status for input 4.

5.2 Status

GUI: V1.0.0
FW: V1.0.0

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Standby Log Out

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Status

Inputs	Active	EDID
INPUT 1	☒	1080p60, 2.0ch PCM
INPUT 2	☒	1080p60, 5.1ch DTS/Dolby
INPUT 3	☐	4K60 4:4:4, 8-bit colour, 2.0ch PCM
INPUT 4	☐	4K60 4:4:4, 8-bit colour, 5.1ch DTS/Dolby

Output	Active	HDCP
OUTPUT	☒	HDCP1.4

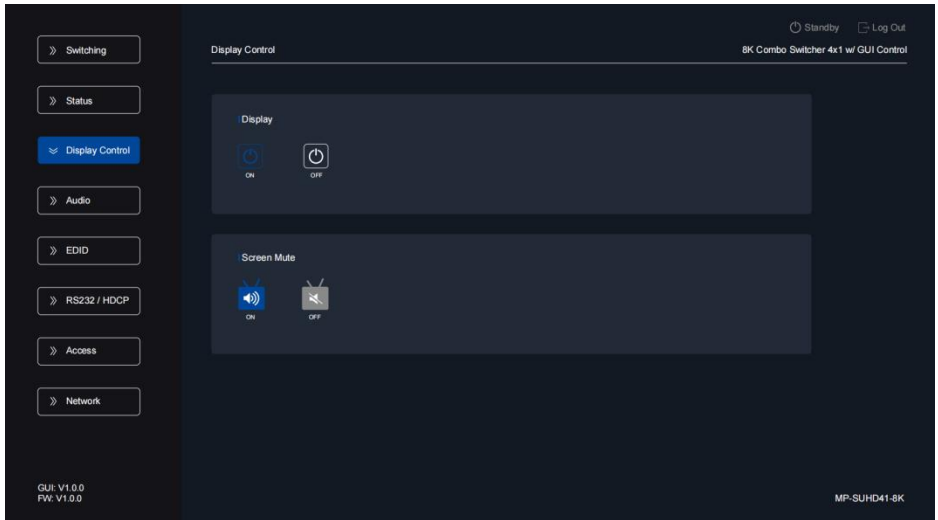
Restore Factory Defaults

Reset

This page for status showing

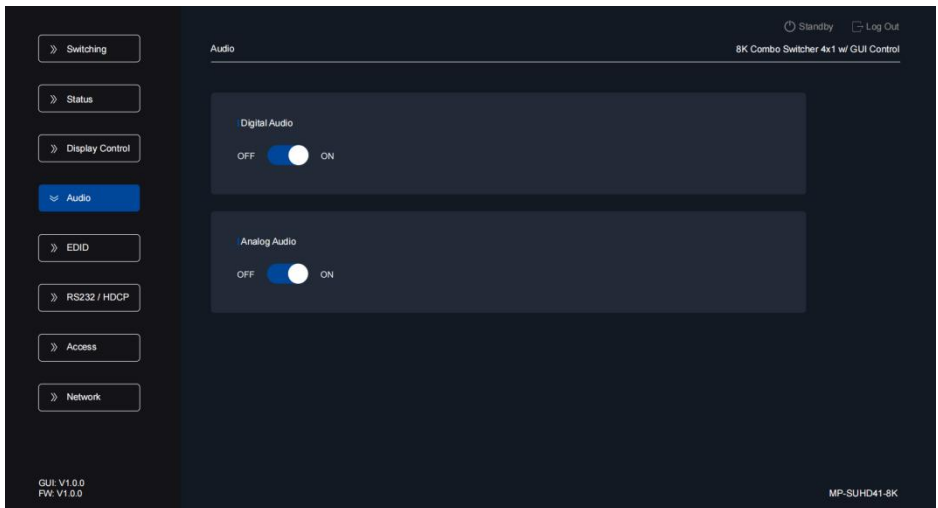
- Inputs: the circle in the active section shows the input port connecting status, if the circle shows blue means input connected;
- Output: the circle in the active section shows the output port connecting status.
- Restore Factory Defaults: The “confirm” button is used for Restore Factory Defaults.

5.3 Display Control Tab



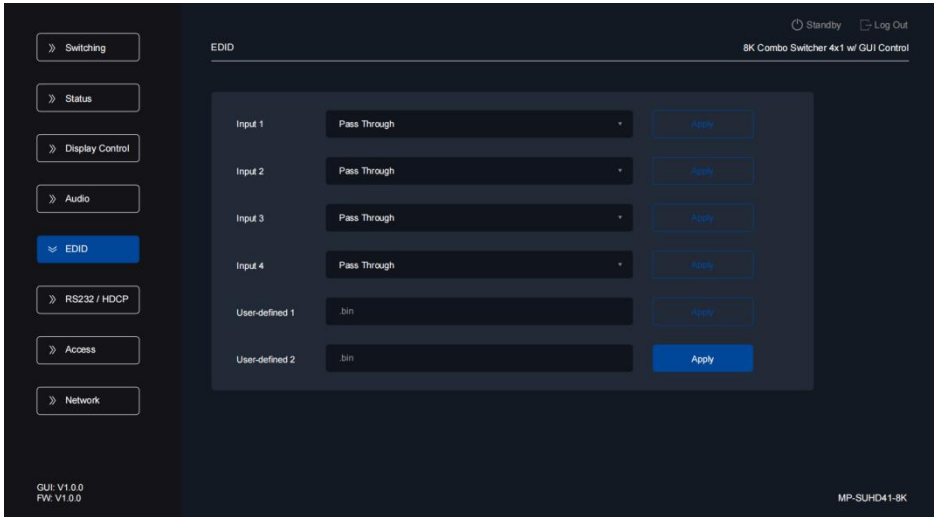
- Set the display on/off.
- Set the screen mute on/off.

5.4 Audio Tab



- Set the digital audio on/off.
- Set the analog audio on/off.

5.5 EDID Tab

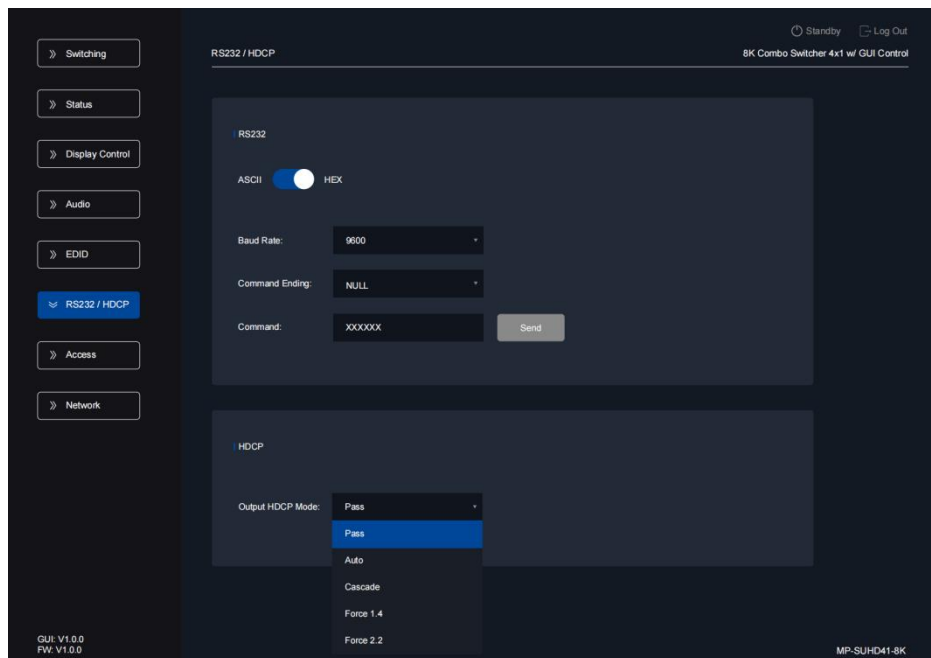


- Choose EDID from the drop-down list for connected port, and press APPLY button.

User can also preset EDID for other 3 input ports.

- Click content area of user-defined1/2 to set user-defined EDID.
User-defined EDID can be customized by the below steps:
Step 1: Prepare the EDID file (.bin) on the control PC.
Step 2: Click content area of user-defined1/2 to select the EDID file (.bin) according the tool tip.
Step 3: Click **Apply** to upload the user-defined EDID.

5.6 RS232 & HDCP



RS232

- Choose ASCII or HEX.
- Baud Rate: Supports 2400, 4800, **9600(default)**, 19200, 38400, 57600, 115200
- Command Ending: NULL, CR, LF or CR+LF.
- Command: Type the command in the text field and press send button to control the third-party device which is connected to the RS232 port of the MP-SUHD41-8K.

HDCP: Click to choose output HDCP mode in the drop-down list.

- 1) Pass
- 2) Auto
- 3) Cascade
- 4) Force 1.4
- 5) Force 2.2

5.7 Access Tab

The screenshot displays the 'Access' configuration page of the 8K Combo Switcher 4x1 w/ GUI Control. The interface features a dark theme with a sidebar on the left for navigation. The main content area is titled 'Access' and includes the following sections:

- Admin Credentials:** A section for modifying the login password, featuring a 'Password' input field and a 'Confirm' button.
- Host Name:** A section for setting the host name, with a 'Host Name' input field (pre-filled with 'MP-SUHD41-8K') and a 'Confirm' button.
- Front Panel Lock:** A section with a toggle switch to lock or unlock the front panel buttons, labeled 'ON' and 'OFF'.
- Firmware Upgrade:** A section for upgrading the firmware, featuring a 'bin' input field and a 'Confirm' button.
- Auto Standby:** A section with a toggle switch for auto standby, labeled 'ON' and 'OFF', and a time input field in minutes with a 'Confirm' button.

Top right navigation links include 'Standby' and 'Log Out'.

1) Admin Credentials

- Modify the login password of admin.

2) Host Name

- MNew Host Name, and to confirm.

3) Front Panel Lock

- Lock or unlock the front panel buttons.

(When lock the front panel buttons, to press the front panel buttons, the buttons blink.)

4) Firmware Upgrade

- Choose the firmware upgrade file and click confirm to upgrade the firmware.

5) Auto Standby

- Set the auto standby on/off, set the standby time.

When Auto Standby enabled and no signal detected in set standby time, the system will enter Standby mode.

5.8 Network Tab

Network

Standby Log Out

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MAC Address: 44-33-4C-C9-35-12

DHCP ☐ Static IP ☒

IP Address: 192.168.0.178

Subnet Mask: 255.255.255.0

Gateway: 192.168.0.1 [Confirm](#)

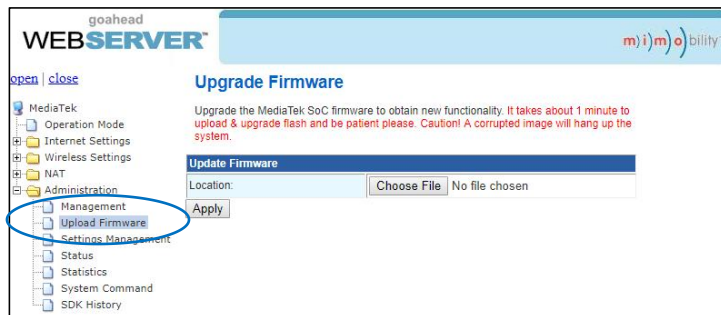
GUI: V1.0.0
FW: V1.0.0

MP-SUHD41-8K

- Set IP address to Static IP or DHCP.
- Set IP Address, Subnet Mask, and Gateway when in Static IP mode.

5.9 GUI Update

Web-based GUI for the Seamless Switcher supports online update in <http://192.168.0.178:100>. First, the Switcher is running. Type the username and password (the same as the GUI log-in settings, modified password will be available only after rebooting) to log in the configuration interface. After that, click **Administration** at the source Tab to get to **Upload Program** as shown below:



Select the desired update file and press "Apply", it will start upgrading then. Last, check whether there is a reminder named check ok, if yes, the GUI was updated successfully, otherwise, the GUI updating is fail, and then follow the above steps to update again

6. RS232 Control

Connect the RS232 port to control device (e.g. PC) with RS232 cable. The switcher can be controlled by sending RS232 commands.

The below command lists are used to control the switcher. The RS232 control software (e.g. docklight) needs to be installed on the control PC to send RS232 commands.

After installing the RS232 control software, please set the parameters of COM number, bound rate, data bit, stop bit and the parity bit correctly, and then you are able to send command in command sending area.

Baud rate: **9600 (Default)**

Data bit: 8

Stop bit: 1

Parity bit: none

Note:

- In the commands, “[” and “]” are symbols for easy reading and do not need to be typed in actual operation.
- Type the command carefully, it is case-sensitive.

The ending mark of command is “<CR><LF>”.

#	RS232 CMD	Example	Example feedback
1	STATUS	STATUS	- Model name:MP-SUHD41-8K - Model type:4x1 8K Switcher - FW Version: V1.0.0 - Power: on - Charging: Off - Front panel: unlocked - Local RS232 baud rate: 9600 - MAC 60-F8-AC-1F-20-30 - DHCP on - IP 192.168.0.178 - IP MASK 255.255.255.0 - IP GATEWAY 192.168.0.1 - Auto switch: off - Autos witch mode: 5V - Input 1 EDID: 32

#	RS232 CMD	Example	Example feedback
			- Input 2 EDID: 32 - Input 3 EDID: 32 - Input 4 EDID: 32 - Output: input 1 - Output mute: off - Display: on - HDCP: follow display - DISPRS232ON: 0:0: - DISPRS232OFF: 0:0: - Standby mode delay time: 5 mins - Analog audio: on - Digital audio: on - eARC: off
2	HELP	HELP	List commands 1.HELP 2.STATUS 3.REBOOT 4.RESET 5.BAUDRATE:<x> 6.POWER:ON 7.POWER:OFF 8.VIDEO[x]:<y> 9.AUDDEC[x]:ON 10.AUDDEC[x]:OFF 11.AUTOSWITCH:ON 12.AUTOSWITCH:OFF 13.SIGTRGMODE:<x> 14.LOCKED 15.UNLOCKED 16.AVMUTE[x]:ON 17.AVMUTE[x]:OFF 18.EDIDU:<x> 19.EDID<x>:<y> 20.SETIP:<xxx.xxx.xxx.xxx> 21.SETMASK:<xxx.xxx.xxx.xxx> 22.SETGATEWAY:<xxx.xx x.xxx.xxx> 23.SETETHMAC:<xx-xx- xx-xx-xx-xx> 24.DHCP:ON 25.DHCP:OFF 26.DHCPSTATUS

#	RS232 CMD	Example	Example feedback
			27.RS232SEND:<y>:<z>:<aaa> 28.CECI[x]:<yyy> 29.CECO[x]:<yyy> 30.HDCP[x]:MAT 31.HDCP[x]:PAS 32.HDCP[x]:ON 33.HDCP[x]:OFF 34.HDCP[x]:F2 35.HDCPSTATUS 36.DISPRS232ON[x]:<y>:<z>:<aaa> 37.DISPRS232OFF[x]:<y>:<z>:<aaa> 38.STANDBYTIME:<x> 39.EARC:ON 40.EARC:OFF
3	REBOOT	REBOOT	/
4	RESET	RESET	OK: Factory Default.
5	BAUDRATE:<x>	BAUDRATE:3 BAUDRATE:9600	OK: Set baudrate to 9600.
6	POWER:ON	POWER:ON	OK: Power on.
7	POWER:OFF	POWER:OFF	OK: Power off.
8	VIDEO[x]:<y>	VIDEO:1/VIDEO0:1	OK: Output switch to input 1.
9	AUTOSWITCH:ON	AUTOSWITCH:ON	OK: Auto switch mode on.
10	AUTOSWITCH:OFF	AUTOSWITCH:OFF	OK: Auto switch mode off.
11	SIGTRGMODE:<x>	SIGTRGMODE:1	OK: Set signal trigger mode to hot plug.
12	LOCKED	LOCKED	OK: Front panel locked.
13	UNLOCKED	UNLOCKED	OK: Front panel unlocked.
14	AVMUTE[xx]:ON	AVMUTE1:ON	OK: Output audio and video mute on.
15	AVMUTE[xx]:OFF	AVMUTE1:OFF	OK: Output audio and video mute off.
16	EDID<x:y>	EDID1:1	OK: Input 1 EDID upgrade by 1 EDID. OK: All input EDID upgrade by 1 EDID.

#	RS232 CMD	Example	Example feedback
17	EDIDU[:x]	EDIDU:1	OK: User define EDID 1 upgraded.
18	SETIP:<xxx.xxx.xxx.xx x>	SETIP:192.168.0.178	OK: IP addr: 192.168.0.178
19	SETMASK:<xxx.xxx.xx x.xxx>	SETMASK:255.255.255.0	OK: IP Mask: 255.255.255.0
20	SETGATEWAY:<xxx.x xx.xxx.xxx>	SETGATEWAY:192.168.0.1	OK: IP Gateway: 192.168.0.1
21	SETETHMAC:<xx-xx-xx-xx-xx-xx>	SETETHMAC:01-02-03-04-05-06	OK: ETH MAC: 01-02-03-04-05-06
22	DHCP:ON	DHCP:ON	OK: DHCP on.
23	DHCP:OFF	DHCP:OFF	OK: DHCP off.
24	DHCPSTATUS	DHCPSTATUS	- DHCP: off
25	RS232SEND:<y>:<z>:<aaa>	RS232SEND:3:1:123456 RS232SEND:3:2:31 32 33 34 35 36	OK: RS232SEND: 3:1:123456 123456 OK: RS232SEND: 3:2:31 32 33 34 35 36 123456
26	CECI[x]:<yyy>	CECI2:04444A	OK: Input 2 CEC send <04 44 4A>.
27	CECO[x]:<yyy>	CECO1:4004 CECO1:4036	OK: Output 1 CEC send <40 04>. OK: Output 1 CEC send <40 36>.
28	HDCP[x]:MAT	HDCP:MAT	OK: Output HDCP follow display. OK: All outputs HDCP follow display.//
29	HDCP[x]:PAS	HDCP:PAS	OK: Output HDCP follow input. OK: All outputs HDCP follow input.//
30	HDCP[x]:ON	HDCP:ON	OK: Output HDCP on. OK: Output 1 HDCP on.//
31	HDCP[x]:OFF	HDCP:OFF	OK: Output HDCP debug off. OK: Output 1 HDCP debug off.//

#	RS232 CMD	Example	Example feedback
32	HDCP[x]:F2	HDCP:F2	OK: Output HDCP force 2.2. OK: Output HDCP 1 force 2.2.//
33	HDCPSTATUS	HDCPSTATUS	- HDCP: follow input
34	DISPRS232ON[x]:<y>: <z>:<aaa>	DISPRS232ON:3:1:123 456 DISPRS232ON:3:2:31 32 33 34 35 36	OK: DISPRS232ON: 3:1:123456 OK: DISPRS232ON: 3:2:31 32 33 34 35 36
35	DISPRS232OFF[x]:<y> :<z>:<aaa>	DISPRS232OFF:3:1:12 3456 DISPRS232OFF:3:2:31 32 33 34 35 36	OK: DISPRS232OFF: 3:1:123456 OK: DISPRS232OFF: 3:2:31 32 33 34 35 36
36	STANDBYTIME:<x>	STANDBYTIME:0 STANDBYTIME:5	OK: Nerver go into standby mode. OK: Set 5 mins go into standby mode.
37	AUDDEC[x]:ON	AUDDEC1:ON	OK: Audio decode 1 on.
38	AUDDEC[x]:OFF	AUDDEC1:OFF	OK: Audio decode 1 off.
39	AUDDECSTATUS	AUDDECSTATUS	- Analog audio: on - Digital audio: on
40	EARC:ON	EARC:ON	OK: eARC on.
41	EARC:OFF	EARC:OFF	OK: eARC off.
42	EARCSTATUS	EARCSTATUS	- eARC: on